

CLAIM AMENDMENTS

IN THE CLAIMS:

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Previously Presented) An electrosurgical probe for treating a target tissue at a surgical site, comprising:

a shaft having a shaft distal end and a shaft proximal end; and

an electrode assembly disposed on the shaft, wherein the electrode assembly includes an electrically insulating electrode support and at least one active electrode terminal arranged on a treatment surface of the electrode support, wherein the at least one active electrode terminal protrudes from the treatment surface and each of the at least one active electrode terminal has an electrode lumen therethrough, wherein the electrode lumen extends through the treatment surface and is adapted for removing unwanted materials from the surgical site;

the at least one active electrode terminal comprises an end having an open electrode port in communication with the electrode lumen; and

the at least one active electrode terminal comprises a body having a substantially cylindrical wall and a suction opening longitudinally formed therein, the suction opening laterally oriented on the wall of the body and in communication with the electrode lumen.

2. (Original) The probe of claim 1, wherein the electrode lumen is in communication with a vacuum source.

3. (Original) The probe of claim 1, wherein the electrode lumen forms part of an aspiration unit.

4. (Previously Presented) The probe of claim 1, wherein the at least one active electrode terminal includes a working end, and the electrode lumen terminates in the electrode port at the working end.

5. (Original) The probe of claim 4, wherein the electrode support includes a suction cavity.

6. (Previously Presented) The probe of claim 5, wherein the suction opening is in communication with the suction cavity of the electrode support.

7. (Original) The probe of claim 6, wherein the suction opening comprises a slit.

8. (Previously Presented) The probe of claim 7, wherein the slit is arranged longitudinally in the wall.

9. (Original) The probe of claim 7, wherein the slit is continuous with the electrode port.

10. (Original) The probe of claim 7, wherein the suction opening further comprises a window.

11. (Original) The probe of claim 6, wherein the suction opening extends from the working end of the at least one active electrode terminal to the suction cavity of the electrode support.

12. (Original) The probe of claim 6, wherein the suction opening causes preferential flow of an aspiration stream at a first region of the working end.

13. (Original) The probe of claim 12, wherein the suction opening defines the first region and a second region, wherein the first region is characterized by a higher flow rate of the aspiration stream than the second region.

14. (Original) The probe of claim 13, wherein the first region lies at or adjacent to the suction opening, and the second region lies substantially opposite the suction opening.

15. (Original) The probe of claim 13, wherein the second region is a shielded region which promotes the generation and maintenance of a plasma at the working end of the at least one active electrode terminal.

16. (Original) The probe of claim 13, wherein the preferential flow of the aspiration stream in the first region promotes the generation and maintenance of a plasma at the second region.

17. (Original) The probe of claim 4, further comprising an aspiration unit including an aspiration lumen.

18. (Original) The probe of claim 17, wherein the aspiration lumen lies within the shaft.

19. (Original) The probe of claim 17, wherein the aspiration lumen is coupled at its proximal end to an aspiration tube.

20. (Withdrawn) A method of treating a target tissue at a surgical site, comprising:
a) providing an electrosurgical probe having an active electrode assembly and a return electrode, the active electrode assembly comprising at least one active electrode terminal protruding from a treatment surface of an electrode support, the at least one active electrode terminal including a body, the body having a substantially cylindrical wall defining an electrode lumen, the electrode lumen terminating in an electrode port and the wall having a laterally oriented suction opening longitudinally formed therein;
b) positioning the active electrode assembly in at least close proximity to the target tissue;
c) applying a high frequency voltage between the at least one active electrode terminal and the return electrode, wherein at least a portion of the target tissue is ablated or modified; and
d) aspirating a fluid through the electrode port and suction opening of the electrode lumen and into a suction cavity disposed in the electrode support.